GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 4401/1
File Number: 2011/004993
Duration of Permit: From 24 August 2013 to 24 August 2015

PERMIT HOLDER
Luke Michael Millar
Sally Coreena Amabilino

LAND ON WHICH CLEARING IS TO BE DONE
Lot 6871 on Deposited Plan 229180, Northcliffe

AUTHORISED ACTIVITY
The Permit Holder shall not clear more than 3 hectares of native vegetation and 30 native trees within the area hatched yellow on attached Plan 4401/1.

CONDITIONS

1. Avoid, minimise etc clearing
In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
(a) avoid the clearing of native vegetation;
(b) minimise the amount of native vegetation to be cleared; and
(c) reduce the impact of clearing on any environmental value.

2. Dieback and weed control
When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:
(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
(b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

DEFINITIONS
The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation; and

weed/s means any plant -

(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or

(b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or

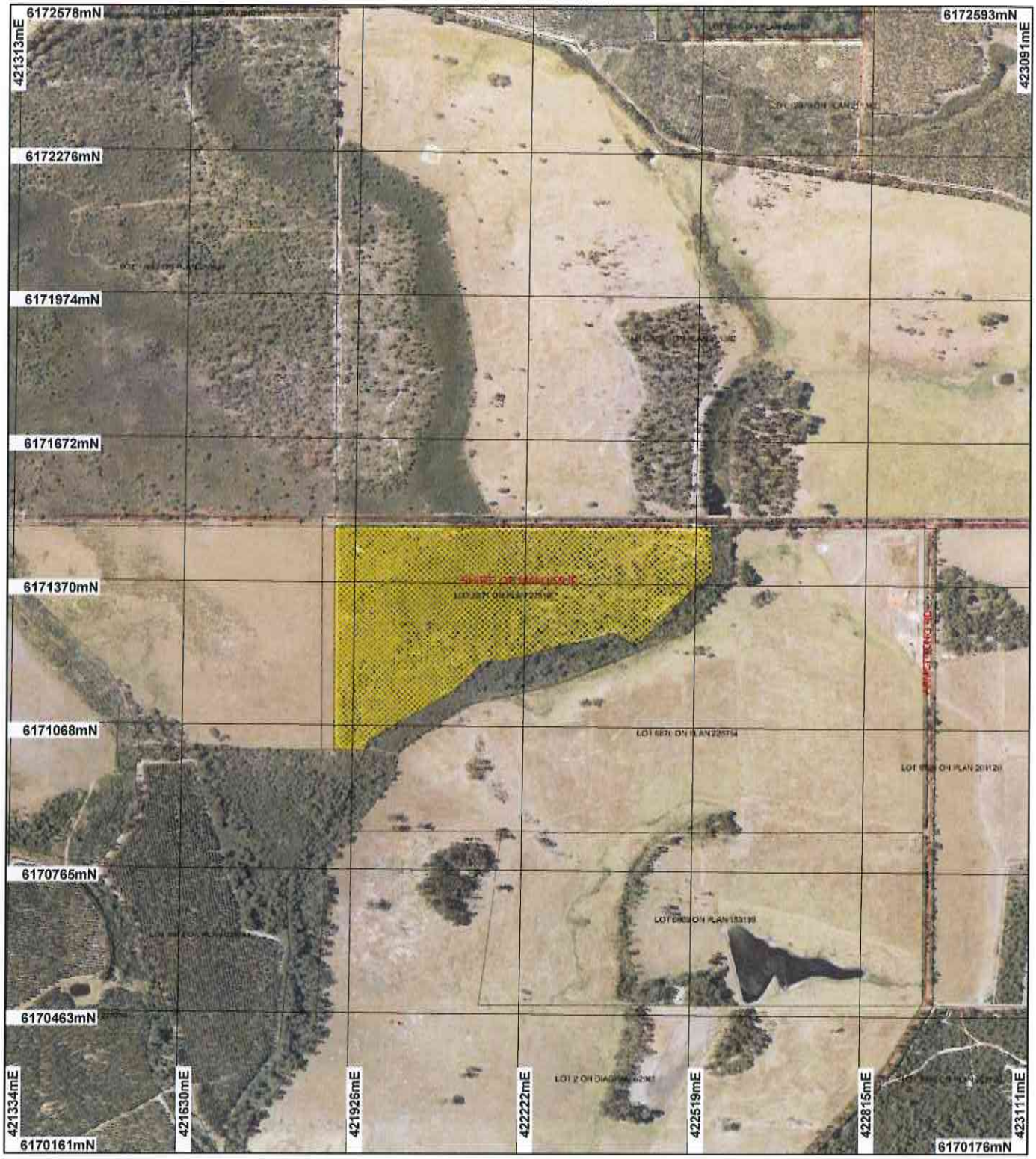
(c) not indigenous to the area concerned.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

25 July 2013

Plan 4401/1



LEGEND

Road Centrelines Cadastre

Local Government Authorities

Clearing Instruments

Areas Approved to Clear

Northcliffe 50cm Orthomosaic - Landgate 2007

N

0 300 m

Scale 1:10607

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M. Warnock

Date 25/7/13

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.

Government of Western Australia
Department of Environment Regulation

* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.:	4401/1
Permit type:	Area Permit

1.2. Proponent details

Proponent's name:	**Luke Michael Millar**

1.3. Property details

Property:	LOT 6871 ON PLAN 229180 (House No. 247 MINCHIN BOORARA BROOK 6262)
Local Government Area:	Shire of Manjimup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3	30	Mechanical Removal	Dam construction or maintenance

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	25 July 2013

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard vegetation association 23: Low woodland, jarrah-banksia (Shepherd et al, 2001).	The application area consist of three hectares of native vegetation and 30 native trees for the purpose of creating a water storage dam and firebreaks.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition and the description of the vegetation under application has been established through a site visit conducted by Department of Environment and Conservation officers on the 20 July 2011 (DEC, 2011).
Mapped Beard vegetation association 1144: Tall forest, karri & marri (Corymbia calophylla) (Shepherd et al, 2001).	The vegetation under application consists mainly of Eucalyptus marginata with an understory of Banksia quercifolia, Banksia illicifolia and Anarthria scabra and a assortment of ground cover species. The vegetation is considered to be in an excellent (Keighery, 1994) condition (DEC, 2011).		
Mapped Mattiske vegetation complex as A, Angove is described as Open forest of Eucalyptus marginata subsp. marginata-Banksia ilicifolia-Nuytsia floribunda with some Eucalyptus diversicolor on gently sloping sandy terrain in hyperhumid and perhumid zones (Mattiske and Hevel, 1998).			

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal may be at variance to this Principle

The applicant proposes to clear 3 hectares of native vegetation and 30 native trees within Lot 6971, Northcliffe, enabling the construction of a water storage dam and fire breaks. The application area is in close proximity to a minor perennial waterway (DoW, 2011) that drains into the Gardner River which is on the southern boundary of Lot 6971 and parts of the application area may be subject to seasonal inundation (DEC, 2011).

The local area (10 kilometre radius) has approximately 75 per cent of its pre-European vegetation extent remaining, and the Beard and Mattiske vegetation complexes mapped within the application area are well represented in the bioregion.

The vegetation is considered to be dense (DEC, 2011), in excellent (Keighery, 1994) condition (DEC, 2011) and mainly consists of Eucalyptus marginata with several middle and under storey species found (DEC, 2011). The

dense vegetation may provide habitat suitable for a range of flora and fauna species of conservation significance such as the Quenda (Isoodon obesulus fusciventer) and Quokka (Setonix brachyurus), while the priority flora species Cyathochaeta stipoides (P3) was noted during a site inspection (DEC, 2011).

Given the above, the application may be at variance with this principle.

Methodology

References
- DEC (2011)
- DoW (2011)
- Keighery (1994)

GIS databases:
- SAC Bio Datasets 29/6/2011
- Northcliffe 50cm Orthomosaic - Landgate 2007

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is not likely to be at variance to this Principle

A number of fauna species of conservation significance have been recorded within the local area (10 kilometre radius). Most notable are the Quenda (Isoodon obesulus fusciventer) and Quokka (Setonix brachyurus) as scratchings around the applicant's house that may be associated with these species were observed (DEC, 2011). However, as the vegetation is well represented (approximately 75 per cent) within 10 kilometres of the application area, it is unlikely that the removal of the vegetation will have a significant impact on either the Quenda or Quokka.

An Emu nest containing eggs was also found within the clearing area (DEC, 2011), however as the proposed clearing is not due to start until summer of 2011, it is considered that the Emu eggs would have hatched and moved out of the clearing area.

Given the above, this application is not likely to be at variance with this principle.

Methodology

References:
- DEC (2011)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal is not likely to be at variance to this Principle

One species of rare flora has been recorded in the local area (10 kilometre radius). This species was located approximately 2.6 kilometres east of the application area and has been mapped on the same Beard and Mattiske vegetation complexes and soil type of that associated with the area under application.

This rare flora species is an annual semi aquatic herb and is known to exist within areas subject to permanent water inundation. The area under application is subject to seasonal inundation and is suitable for aquatic vegetation (DEC, 2011).

On 18 April 2013, an officer from Department of Parks and Wildlife inspected the application area for the presence of rare flora and did not observe this species (DPaW 2013).

The proposed clearing is not likely to be at variance to this principle.

Methodology

Reference:
- DEC (2011)
- DPaW (2013)

GIS Databases:
- Mattiske Vegetation
- Pre European Vegetation
- Soils, Statewide
- SAC Bio Datasets Accessed 29/6/2011

GIS Database:
- SAC Bio Datasets 29/6/2011

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments

Proposal is not likely to be at variance to this Principle

The nearest threatened ecological community (TEC) has been mapped approximately 10 kilometres away from the application area.

Given the distance from the TEC to the area under application it is unlikely that removal of the vegetation within the application area will have a significant impacts to the known TEC, therefore it is not likely to be at variance with this principle.

Methodology

GIS Databases:
- SAC Bio Datasets Accessed 29/6/2011
- Northcliffe 50cm Orthomosaic - Landgate 2007

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments

Proposal is not likely to be at variance to this Principle

The vegetation under application is described as Beard vegetation associations 23 and 1144 (Shepherd et al, 2001), and Mattiske vegetation complex Angove (Shepherd, 2007).

The national objectives and targets for biodiversity conservation in Australia, has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). The vegetation complexes mapped in the application area are above the 30 per cent threshold level.

The area under application may contain flora and fauna of conservation significance and therefore may be considered significant as a remnant, however the vegetation within the local area has not been extensively cleared and is well represented with approximately 75 per cent of its pre-European vegetation remaining.

Given the above, this application is not likely to be at variance with this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion				
Warren	833,981	667,164	80.00	82.49
Shire				
Shire of Manjimup	697,370	589,248	84.50	92.33
Beard Vegetation Association in Bioregion				
23	37,735	27,966	74.11	72.95
1144	159,668	127,144	79.63	90.85
Mattiske Vegetation Complex				
(A) Angove	39,698	35,683	89.89	79.96

Methodology

- Commonwealth of Australia (2001)
- Shepherd et al (2001)
- Shepherd (2007)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments

Proposal is at variance to this Principle

The area under application is located in close proximity to a minor perennial waterway that drains into the Gardner river (DoW, 2011). Aerial imagery interpretation suggests that the application area consists of riparian vegetation and water dependant vegetation. The removal of water dependent vegetation could lead to changes in hydrological balance in the proposed application area, thus creating negative impacts upon other water dependent vegetation and surrounding habitats (DOW, 2011).

Given that the area under application contains riparian vegetation and is subject to seasonal inundation the proposed clearing is at variance with this Principle.

Methodology

Reference:
- DoW (2011)

GIS Database:
- Hydrography linear
- Northcliffe 50cm Orthomosaic - Landgate 2007

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is not likely to be at variance to this Principle

The mapped soil type is Wd8, which is described as gently undulating drainage divides developed on quartzite with the chief soils being sandy yellow mottled soils with leached sands, sometimes associated with ironstone gravelly soils (Northcote et al 1960-8).

The clearing of the vegetation under application, which includes riparian vegetation, may lead to soil erosion from bank instability and result in sedimentation of the water course, however, given that the property will retain approximately 80 per cent of its native vegetation on completion of the clearing, the risk is considered to be low and short term.

Given the above, the risk of land degradation is considered to be low and short term therefore the clearing as proposed is not likely to be at variance with this principle.

Methodology

Reference:
-Northcote (1960 - 1968)

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments

Proposal is not likely to be at variance to this Principle

The area under application is located approximately 1.5km north of the Warren State Forest and 1.2km east of the Jane National Park.

Given the distance to the conservation areas, it is unlikely that the proposed clearing will have any impact on the environmental values on the State Forrest and National Park. Therefore the proposed clearing is not likely to be at variance with this principle.

Methodology

GIS Database:
- DEC Tenure 29/6/2011

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments

Proposal may be at variance to this Principle

The area under application is within close proximity to a minor perennial waterway that drains into the Gardner River (DoW, 2011) and is subject to seasonal inundation (DEC, 2011). Aerial imagery interpretation suggests that the application area consists of riparian vegetation, therefore the proposed clearing may cause deterioration in surface water through water erosion and subsequent sedimentation of the adjacent Gardner River that borders the southern boundary of the property.

The clearing of wetland dependant vegetation, particularly deep rooted trees, may also result in the release of acid sulphate soils which may cause the deterioration in the quality of the surface water.

Given the above this principle may be at variance.

Methodology

References:
- DEC (2011)
- DoW (2011)

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments

Proposal is not likely to be at variance to this Principle

The vegetation within the application area is considered to be in an excellent (Keighery, 1994) condition (DEC, 2011), is within close proximity to a minor perennial waterway (DoW, 2011) and the application area is subject to seasonal inundation (DEC, 2011). However a recent site inspection indicated that there has been no evidence of recent surface water runoff and as the property will still contain approximately 80 per cent of its native vegetation remaining after completion of the clearing, there is expected to be a low possibility of this clearing causing or increasing the incidence or intensity of flooding.

Given the above it is unlikely for the application to be at variance with this principle.

Methodology References:
- DEC (2011)
- Dow (2011)
- Keighery (1994)

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

On 11 August 2011 the then Department of Environment and Conservation sent a letter and Preliminary Assessment Report to the applicant advising that a targeted flora report is required to determine the presence of rare flora. On 18 April 2013 the area under application was surveyed for the presence of rare flora and none were found (DPaW, 2013).

The Department of Water (DoW) advise the proposed clearing is located in close proximity to a minor perennial waterway that drains to the Gardner River and that it does not support the clearing of riparian vegetation. The removal of riparian vegetation can lead to the destabilisation of stream banks, causing erosion and sedimentation of the waterway and increase turbidity of the water. Furthermore DoW does not support the removal of water dependant vegetation as it could lead to changes to the hydrological balance in the localised area.

The proposed clearing is not located in a Rights in Water and Irrigation (RIWI) Act proclaimed surface water area, therefore no permits are required for the construction of dams or for the taking of water (DoW, 2011).

The proposed clearing is within the Shire of Manjimup town planning scheme zone classified as rural. The proposed clearing is compliant with the rural town planning scheme, therefore no further licenses or approvals are needed. However the applicant is advised to confer with the Shire of Manjimup (2011) with respect to the need to comply as relevant with all requirements relating to its town planning scheme, local laws and legislation relating to the movement of heavy vehicles and repair of road damage resulting from the use of those vehicles.

Methodology References:
-DoW (2011)
-Shire of Manjimup (2011)

GIS Databases:
Town Planning Scheme Zones

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4401/1, Lot 6871 Yubarl Road, Northcliffe. Site inspection undertaken 20/7/2011. Department of Environment and Conservation, Western Australia (TRIM Ref. DOCA415733).

DoW (2011) Advice for Clearing Permit Application CPS 4401/1 Lot 6871 Yubarl Road, Northcliffe (DEC Ref: A412574)

DPaW (2013) Advice on flora survey for Clearing Permit Application CPS 4401/1 (DER Ref: A652266).

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2007) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Shire of Manjimup (2011) Advice for Clearing Permit Application CPS 4401/1 Lot 6871 Yubarl Road, Northcliffe (DEC Ref: A407020).